MEDICAL SERVICE IN AMPHIBIOUS OPERATIONS

COMINCH P-8

1 September 1945

HEADQUARTERS OF THE COMMANDER IN CHIEF
UNITED STATES FLEET
NAVY DEPARTMENT • WASHINGTON, D. C.

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Headquarters of the Commander in Chief, United States Fleet
Navy Department
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MEDICAL SERVICE IN AMPHIBIOUS OPERATIONS

Section 1. DOCTRINE

1. Medical Services of an Amphibious Force are designed to support the operation. Casualty handling is a fundamental task of this medical service. The seaward movement of casualties during the early assault phase presents many difficulties which may be attributed to the variables of amphibious assaults. Those which must be recognized and provided for in early medical planning are:

(*a*) The magnitude of the operation:—(1) The size of the forces involved: (2) the strength and disposition of the enemy: and (3) the size of the land mass.

(*b*) The character of the terrain:—(1) The topography and (2) the hydrography.

(*c*) The type of operation:—(1) Whether ship to shore or (2) shore to shore.

(*d*) The type of vessels employed.

(*e*) The distance from friendly bases.

(*f*) Estimate of casualty percentage and casualty rate.

2. The Organization of the Medical Service of a force, to accomplish the medical mission in an amphibious operation, must be based on the medical estimate of the situation in which is presented the specific tasks to be accomplished and from which are derived the contributory plans.

3. Allocation of Responsibilities:

3.1 The naval elements of an amphibious force are responsible for:—(1) Medical service to all attached and embarked personnel between the points of embarkation and the assault beaches: (2) Assist the landing force in providing medical service to all personnel in the beach area: (3) seaward evacuation and hospitalization afloat within the combat zone: (4) evacuation by ship from the combat zone to the rear areas.

3.2 The landing force elements are responsible for:—(1) Medical service to own personnel when ashore—prior to embarkation and after debarkation: (2) assisting the ship's medical department in maintaining medical service to landing force personnel while embarked in naval vessels: and (3) medical services to all personnel in the beach area.

3.3. The air elements of an amphibious force are responsible for casualty evacuation by air in accordance with the operation plan. In some operations both army and navy air elements will participate from a common base. Responsibility should be fixed.

4. Premises Used for Basis of Establishing Amphibious Medical Service:

4.1 That medical officers, experienced in amphibious warfare, are assigned to the staffs of key command echelons.

(*a*) That these medical officers have free access to operational planning and are included in all staff conferences.

(*b*) That they are given full support of the command for the accomplishment of their task.

4.2 That a careful medical estimate of the situation is used as the basis of planning.

4.3 That the medical service of the naval, ground and air elements is so integrated as to effect uniformity.

4.4 That the force has conducted realistic training and casualty handling exercises.

4.5 That plans have been provided for medical logistic support.

5. **Medical Preparation** for an amphibious operation includes:—(1) A study and development of the facilities to be employed; (2) a study and development of specific technics to be employed; and (3) necessary revision of the standard operating procedure.

6. **Medical Planning** must be based on:—(1) The medical estimate of the situation: (2) the operation plan: and (3) the integration of detailed plans of the naval, ground and air elements involved through medical participation in operational planning.

6.1 The medical plan for a specific amphibious operation is prepared as an annex to the operation plan and/or, the administrative order. It sets forth the medical situation, mission and plan of action in sufficient detail to insure coordinated action by all elements of the command. It should be as simple and as brief as is consistent with proper dissemination of necessary information. Medical officers responsible for the preparation of medical plans will participate in all phases of operational planning in order that they may be thoroughly familiar with the plan their annex is designed to support. Each echelon of command will define its participation in detail as well as its integration of effort with other units. There must be early distribution of medical plans to responsible medical officers.

7. **Casualty Estimates.**—A casualty estimate for each amphibious operation is a prerequisite to sound medical planning. These estimates, for each specific operation, must be based on all data available.

Experience tables, of amphibious operations in this war to date, present some basis for estimates. Nevertheless, they should be used only as a guide since the casualties incurred in any given operation may be higher or lower than the average percentages given below. These tables show that, for the first 20 days of an amphibious operation, the average percentage of casualties of forces involved are as follows:

(Note: Dead, missing, and captured are not included in casualty evacuation planning.)

(*a*) Total casualties (including battle and nonbattle casualties):

Landing forces ..... 10 to 15 percent

Naval forces ..... 0.5 to 1 percent

(*b*) Of these casualties, 66⅔ percent are non-effectives and require evacuation from the combat zone.

(*c*) Of the casualties evacuated, approximately 66⅔ percent are stretcher cases and 33⅓ percent are ambulatory.

8. **Medical Training** for an amphibious operation is divided into three classes, namely: (1) For non-medical personnel: (2) for specified personnel: and (3) for medical personnel.

8.1 Non-medical personnel:—Commanding officers of all units of an amphibious force will direct their medical officers to supervise and administer teaching of first aid to all personnel, making the latter available for this training. The following subjects will be included in this training.

(*a*) Patient handling—the methods of handling, lifting and transporting casualties.

(*b*) The technique of administration and use of a morphine syrette.

(*c*) First aid treatment of the injured—including handling of fracture cases, bandaging and applying battle dressings, treatment of burns, emergency control of hemorrhage, etc.

(*d*) Resuscitation of the apparently drowned.

(*e*) Personal decontamination (self aid) in chemical warfare.

(*f*) Use of casualty handling equipment.

8.2 *Specified personnel.*—Such naval personnel as may be assigned or subjected to operations ashore. (Beach parties, construction battalions, crews of landing craft and amphibious vehicles, air ground force personnel. In addition to subjects indicated for non-medical personnel, these groups will have training in the simple principles of field hygiene and sanitation. Further, all medical personnel attached or assigned to these units will be trained in: (1) The principle of self defense: and (2) the principle of self survival. Crews of landing craft and amphibious vehicles must have special training in handling casualties that may be transported in their craft or vehicles when no medical personnel are present. This includes first aid, the use of casualty handling equipment and an understanding of the doctrine of shore to ship traffic control as relates to casualty evacuation. Air transport personnel must have special training peculiar to handling casualties evacuated by air.

8.3 *Medical personnel.*—Medical officers will strive to promptly effect and thereafter maintain, a state of efficiency in advanced first aid casualty handling, and utilization of medical department facilities among all personnel of their units.

9. **Casualty Drill Afloat.**—Casualty drills in ships should be conducted to train the crews to handle (1) casualties sustained within the ship, and (2) casualties received from other sources.

9.1 *Casualties sustained within the ship.*—Casualty drills under this condition should be based on a progressive training schedule, the final objective being for actual battle conditions. Thus, the progression should be from handling an occasional accident case, through simulated battle conditions with and without troops and finally, as a participant in a landing operation. By assessing casualties, a complete dress rehearsal is possible. Thus, the continuity of medical care can be observed. If these drills are held concurrently with damage control drills and landing operations, it is possible to test the speed

and efficiency with which the medical and non-medical personnel can handle the situation. An occasional casualty drill should be held in which a simulated gas attack occurs.

9.2 *Casualties received from other sources.*—This type of casualty drill may be held in conjunction with the drills described in paragraph 8.1. The main purpose of this drill is to maintain the ship's readiness for efficient reception and handling of casualties.

10. Joint Casualty Exercises.—Joint training exercises will be conducted in casualty handling and evacuation by the elements of the amphibious force.

10.1 *Description.*—These joint casualty exercises should be conducted as a part of other training exercises. They should be so planned and executed that not only will practical methods of casualty handling be demonstrated, but latent weaknesses revealed. So far as is practicable, conditions expected on an assault beach should be simulated with exactness and realism.

10.2 *Object.*—(1) To develop proficiency in the use of equipment for—and the technique of casualty handling; (2) to determine faulty concepts or weakness in preparation for the task; and (3) to provide participating elements with a view of and practice in the chain of evacuation.

11. Evacuation Policy.—The evacuation policy is a predetermined course of action to be taken during all phases of an operation as regards casualty evacuation. It differentiates between those battle casualties which are to be retained in the theater of operation and those which are to be evacuated to the rear. The policy is expressed in terms of expected convalescence (days). The execution of the policy, i.e., 3 day, 7 day, 15 day, or 30 day, etc., is governed by the ability of the medical activities present in the area to accommodate the casualty load through their expected convalescence. A general policy for evacuating casualties is developed for each operation and will govern basic plans for casualty handling through the several phases of the assault. The policy will: (1) classify and define the several general types of casualties that may be encountered; (2) provide criteria for differentiating non-transportable from transportable cases; and (3) broadly outline procedures to follow in evacuating casualties in the several categories.

11.1 *Flexibility of the policy.*—The policy must be sufficiently flexible to conform to the military situation. During the initial assault, as far as possible, all ineffectives may be evacuated seaward. Later, when medical facilities of the landing force are established ashore, casualties may be held for periods varying from several days to 30 days or longer before evacuation from the combat zone is effected.

11.2 *Execution of the policy.*—All permanent disability cases are evacuated from the theater. The hospital expectancy, the military situation and the available medical facilities determine when the policy is to be executed as set-up in the medical plans of an operation.

12. Organized Casualty Evacuation is a paramount task of an amphibious medical service. Evacuation is the process of moving casualties from one medical installation to another further in the rear. The operation of evacuating casualties

is in the nature of a withdrawal. Factors which render this operation difficult are:

(*a*) The withdrawal must be made against a constant flow of troops and supplies and interference must be kept to a minimum.

(*b*) Evacuees are unorganized, they must be gathered from all units of the force. They are not self-supporting, but require individual care and treatment throughout all stages of their withdrawal. A large proportion are unable to walk and must be carried each time they are moved.

(*c*) Evacuation must be carried on at times under the most trying conditions of weather, terrain and combat. Conditions which seriously impede all movements may increase the number to be evacuated.

(*d*) Casualty handling constitutes a morale factor of great concern to the combatant branches. Anything that distracts the attention of the combat troops decreases their value as fighters. Thus, to lessen the shrieking and groaning of the wounded, to rapidly clear areas of personnel casualties and to maintain an efficient casualty handling service is militarily expedient and generally a military necessity.

13. **The Chain of Evacuation** consists of those facilities through and by which casualties are evacuated to the rear—from the front line aid men to established hospitals in the rear—from elementary first aid to definitive medical treatment. The landing force medical units perform normal functions as prescribed for land warfare modified, in the early stages of an amphibious operation, by the addition of the naval beach and ship medical facilities. Casualty evacuation by air may supplement evacuation by sea.

13.1 The tasks of the medical organization relating to casualty evacuation are: (1) To establish definite lines of organized evacuation as early as is feasible; (2) to provide for adequate medical control in clearing the combat zone of casualties; (3) to utilize the facilities of planned medical service to the fullest; and (4) to designate the specific responsibilities of each medical unit involved in casualty evacuation.

14. **Evacuation Officers Afloat.**—The medical (evacuation) plan for a specific operation will designate the medical responsibilities of each echelon of command. A medical officer should be designated as evacuation officer in these echelons as deemed necessary.

15. **Casualty Handling.**—

15.1 *Area of assault beaches.*—This is the point of transition between naval and land forces in the chain of evacuation. Maximum efficiency with a minimum of confusion in casualty handling depends upon practical training based on sound doctrine, with sufficient personnel to make the training effective. The beach area requires allocation of medical responsibilities for:

(*a*) First aid.

(*b*) Supervision of seaward casualty evacuation.

(*c*) Establishing a station to: (1) Classify and prepare casualties for seaward evacuation; (2) give definitive treatment to non-transportable casualties; and (3) receive casualties from other areas.

(*d*) Operation of a medical supply dump and control of the mechanics of medical resupply.

(*e*) Collection of casualties in the beach area.

(*f*) Loading of all craft and amphibious vehicles for seaward evacuation.

(1) *Liaison officers.*—To facilitate casualty evacuation in this area, appropriate senior command echelons of the naval and air elements concerned will, if deemed necessary, designate a medical or Hospital Corps representative for temporary assignment to the staff of the landing force surgeon. This representative will act in liaison capacity as advisor on casualty evacuation by sea or air and on matters concerning the medical service available in the task unit he represents.

15.2 *Seaward from assault beaches.*—An equitable distribution of casualties among the casualty carrying vessels of the forces afloat is essential to effect efficient medical care.

(*a*) *Traffic control afloat.*—The traffic control organization directs craft and amphibious vehicles involved in shore to ship casualty evacuation in accordance with the medical (evacuation) plan. Adequate medical representation will be made available to the traffic control organization afloat to: (1) advise traffic control officers in matters relating to casualty evacuation; (2) keep necessary records of the casualty flow seaward; and (3) to effect triage if practicable.

(*b*) Before debarkation of troops, establish a watch list from among officers of the medical department in the ship to stand watch with the officer of the deck as casualty control officer.

16. Sorting of Casualties (Triage) is necessary in the proper handling and screening of patients. This occurs automatically at each step in evacuation. Fundamentally, it is based on the evacuation policy plus the medical facilities available.

16.1 During the initial stage of an assault, casualty triage for seaward evacuation is frequently difficult. Later, when casualty evacuation becomes organized, the landing force evacuation officer, with the aid of the liaison officers from the naval and air casualty evacuation elements, is able to separate those to be retained from those to be evacuated.

16.2 Casualties are divided into two main categories, namely: (1) Ambulatory; and (2) stretcher cases. Stretcher cases are generally divided into: (a) Transportable; those casualties who in the opinion of the medical representative can safely tolerate transportation; and (b) nontransportable; casualties requiring immediate medical/surgical attention, i. e., resuscitation or early surgical intervention.

16.3 For evacuation purposes, casualties are classified under the following color scheme:

RED —All serious cases and those requiring over two months hospitalization.

BLUE —Those requiring over two weeks but less than two months hospitalization.

WHITE—Those who should be able to return to duty within two weeks.

(*a*) In all phases, "WHITE" ground force casualties should be retained in the area of the objective until they are able to return to duty or to hospital facilities ashore. All vessels, prior to departure from the combat zone should, when practicable, transfer all such casualties able to return to a duty status to their organizations ashore.

17. **Professional Care of Casualties Being Evacuated.**—The amount and type of medical service rendered casualties increases in direct proportion with the casualty's regression from the front lines.

17.1 *Assault beach area.*—Preparation of the patient to safeguard against the rigors of transportation is the primary function of the medical service in this area. Every expedient, consistent with means available, must be utilized to sustain life. In general, surgery is limited to those non-transportables requiring immediate life saving surgical procedures. In this group are those cases who require surgical intervention within six hours. This includes casualties having serious wounds of the abdomen, serious chest wounds, wounds associated with shock which do not respond to initial therapy, maxillo-facial wounds associated with mechanical difficulty in breathing, etc.

17.2 *Afloat.*—Medical service is based on the professional personnel and equipment facilities available on the vessel, the prime task being care of casualties during evacuation to established hospital facilities. Generally, the service consists largely of control of hemorrhage, treatment of shock, immobilization of fractures, alleviation of pain, and combating infections. The decision to perform definitive surgery should be governed by the type of wound; estimated interval from time wounded until hospital type treatment is available; the professional qualifications of the medical personnel; the surgical equipment and supplies at hand and finally, the number of casualties being cared for.

17.3 Initially, APA's and other assault shipping are the normal casualty carrying vessels available. AH's and APH's should arrive in the area as early as practicable, consistent with the situation. The governing factors as to the employment of various types of vessels for casualty treatment and evacuation are:

(*a*) Medical capabilities of the ships available and composing the force.

(*b*) The character and magnitude of the assault.

(*c*) The nature of the theater of operation.

(*d*) The distance from rear bases.

18. **Casualty Records and Reports.**—Specific instructions relative to casualty reporting are contained in the official manuals and current directives of the Navy. Operational recording and reporting must comply with these instructions. However, formulating the detailed plan of accomplishment is the responsibility of operational command echelons. The staff medical officer of each echelon is responsible for the practical application of the plan in that echelon.

19. **Medical Materiel.**—*Principles.*—Medical materiel must be present and available in sufficient quantities to support the mission of the medical service. Flexible control of replenishment supplies must provide for any contingency. Dispersion of materiel must be practiced by all elements of the force.

19.1 Estimates of medical materiel requirements for a given operation are based on: (1) The number and type of anticipated casualties; (2) extra quantities required by dispersion of materiel; and (3) the reserve for resupply and unexpected loss.

20. **Disposition of the Dead.—**

(*a*) *Ashore.*—The remains of all dead on assault beaches will be retained ashore for identification, recording and burial by the Grave Registration Service of the landing force.

(*b*) *Afloat.*—The remains of all dead afloat will, if practicable, be sent ashore. When conditions do not permit transfer ashore, remains will be properly identified, recorded and buried at sea.

(*c*) Burial of dead is not a medical responsibility.

21. **Geneva Convention.**—Amphibious forces will comply with articles of the Geneva Convention in accordance with the policy set for the theater of operations concerned.

Section II. STANDING OPERATING PROCEDURE

1. Staff Medical Officer.—A staff medical officer is a member of the technical staff of command echelons comprising the force. He advises the commander in matters of preparation for and execution of medical services of the command, based on the plans of senior echelons.

1.1 *Staff Medical Officer of Naval Commands.*—The duties of staff medical officers as hereinafter discussed are those particular duties which most affect the preparation for and execution of medical services in an amphibious operation. Command echelons (see sketch on page 10) are arbitrarily designated herein as Joint Expeditionary Force, Amphibious Group, Transport Squadron and Transport Division in order to encompass a possible chain of command and attendant medical responsibilities.

Joint Expeditionary Force Medical Officer

(*a*) *Preoperational.*—(1) Prepare a medical estimate of the situation based on all available information relative to the task of the force. (2) Develop the medical plan based on (i) the medical estimate, (ii) the operational plan, and (iii) integration of the plans of the naval, ground and air elements involved. (3) Formulate a policy of medical service for the operation.

(*b*) *Operational.*—(1) Advise his commander in all matters concerning the accomplishments of medical services of the force. (2) Assume the duties of (force) evacuation officer.

Amphibious Group Medical Officer

(*a*) *Preoperational.*—(1) Organize, prepare and train the medical elements of the command for operations. (2) Coordinate medical services of subordinate commands. (3) Formulate a plan to guard against an unequitable distribution of casualties being made to evacuation vessels of the command. (4) Train and indoctrinate an assistant for liaison duty with the landing force evacuation officer during the assault. (This liaison officer will act as an advisor in seaward casualty evacuation and other matters concerning medical services of the forces afloat.) (5) Train and indoctrinate such assistants as are necessary for operational assignment to the assault traffic control organization. (These medical representatives will advise the traffic control officers in matters relating to casualty evacuation and maintain records of the seaward casualty flow.) (6) Make a medical plan to support the operational plan.

(*b*) *Operational.*—(1) Advise his commander in all matters concerning the accomplishments of medical service of the command. (2) Assume the duties of (appropriate echelon) evacuation officer.

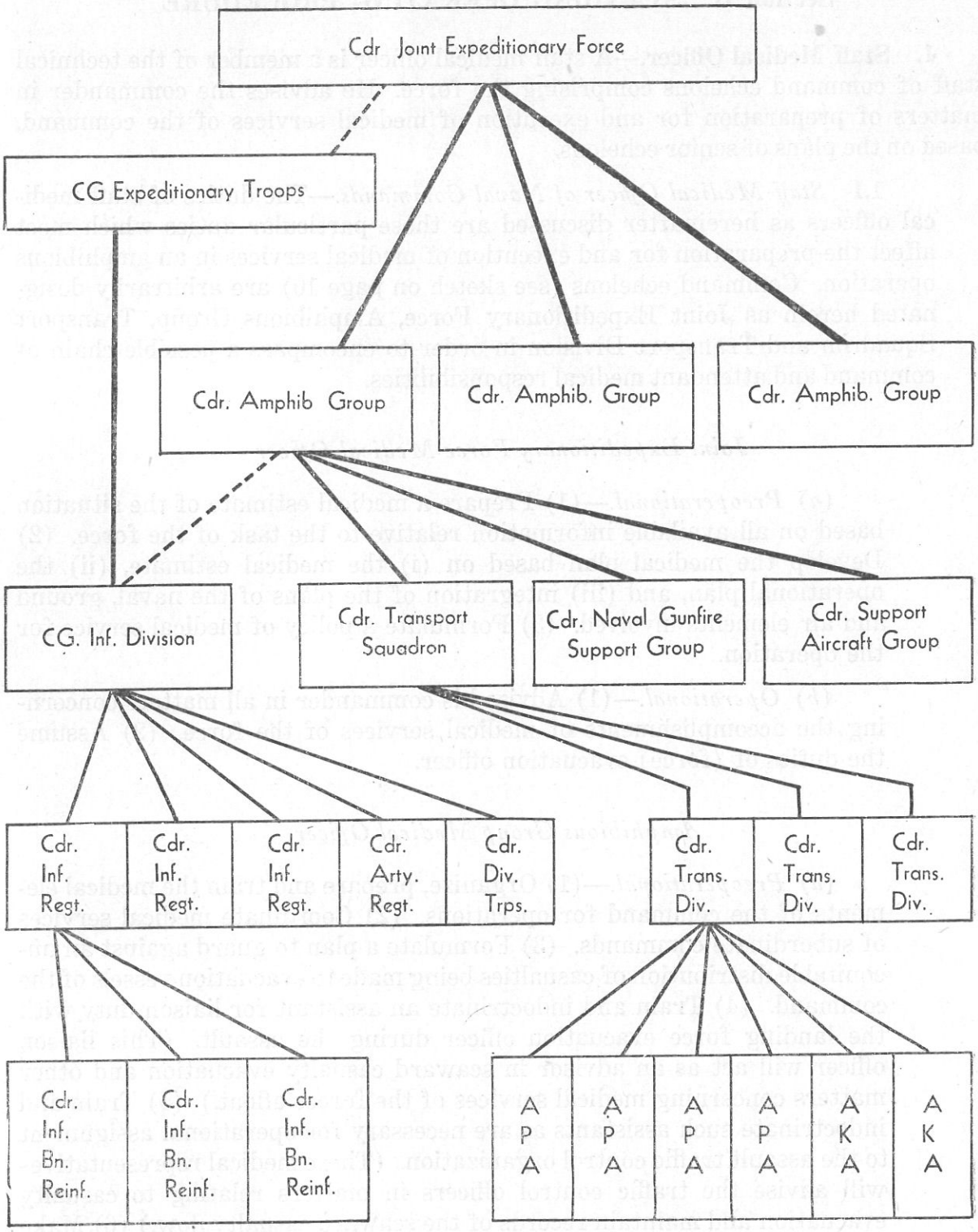

FIGURE 1.—*Command Echelons*

Transport Squadron Medical Officer

(*a*) *Preoperational.*—(1) Prepare details of accomplishing medical service, within the elements of the squadron, as specified in the medical plans of senior commands.

(*b*) *Operational.*—(1) Advise his commander in all matters concerning the accomplishments of medical services of the command. (2) Assume the duties of (appropriate echelon) evacuation officer.

Transport Division Medical Officer

(*a*) *Preoperational.*—(1) Prepare details of accomplishing medical service, within the elements of the division, as specified in the medical plans of senior commands.

(*b*) *Operational.*—(1) Advise his commander in all matters concerning the accomplishments of medical services of the command. (2) Assume the duties of (appropriate echelon) evacuation officer.

1.2 *Staff Surgeon (Medical Officer) of Landing Force Commands.*—There is normally a staff medical officer for each command larger than a company. The staff surgeon is the senior medical officer of the unit to which attached. In general the staff surgeon performs the following duties in addition to his normal duties as a medical officer: (1) He exercises supervision over all medical activities of the command, including instruction of medical personnel. (2) He is charged, under the direction of the commanding officer, with the command of personnel attached to or serving in the medical service. (3) He furnishes his commanding officer with information and advice on all questions affecting the medical department of the command, and prepares the medical plan or order for an amphibious operation. (4) He submits to his commanding officer such recommendations and requests as he may deem advisable as to training, instruction and utilization of non-medical personnel to promote the medical welfare of the command. (5) He initiates and supervises measures for the care, treatment and evacuation of the sick and wounded of the command. (6) He takes measures to insure that the required records are kept and required reports are made by the medical department personnel. (7) He supervises the dental services of the command. (8) He recommends to his commanding officer measures for the prevention and control of disease. (9) In territorial commands, he recommends to his commanding officer visits by himself or his assistants to such places as may be necessary for the purpose of inspecting medical department personnel, equipment, and administration and of investigating conditions affecting the health of military personnel.

(*a*) *The Landing Force Surgeon.*—The senior medical officer on the staff of the landing force commander shall serve as the landing force surgeon. The force surgeon shall have general supervision over all medical activities of the force and will be held responsible for the efficiency of all these activities. He will prepare a medical estimate of the situation

based on all available information relative to the task of the landing force, develop a medical plan based on (i) the medical estimate, (ii) the operation plan, and (iii) the integration of the plans of the naval, ground and air elements involved and will coordinate the activities of the medical elements of the landing force and integrate them with the naval and air elements of the amphibious force. He shall advise his subordinate medical department personnel regarding his decision by a clear and concise order, plan or annex to the operation order. He maintains liaison with the force medical officer afloat.

(*b*) *The Corps Surgeon.*—The senior medical officer on the staff of the corps commander shall serve as the corps surgeon. The duties of the corps surgeon within the corps are analogous to the duties of a force surgeon within the force (para. 1.2 (a)) except that he shall maintain liaison with the force surgeon.

(*c*) *The Division Surgeon.*—The senior medical officer on the staff of the division commander shall serve as the division surgeon. The duties of the division surgeon within the division are analogous to the duties of the force surgeon within the force (para. 1.2 (a)) except that he shall maintain liaison with the corps surgeon.

(*d*) *The Regimental Surgeon.*—The regimental surgeon shall be in charge of all regimental and battalion medical department personnel attached to the regiment. He shall serve in both an advisory and administrative capacity. As a member of the staff of the regimental commander he shall perform the duties of a staff surgeon (para. 1.2) and shall advise the regimental commander in matters of medical and sanitary significance. All advice given or recommendations made shall be consistent with the policies of higher medical authority. In providing complete medical service for the regiment, the regimental surgeon shall: (1) organize the medical detachment of the regiment and plan its work in conformity with the regiment's mission. (2) Supervise all training of the medical personnel of the regiment. (3) Arrange for instruction of the entire personnel of the regiment in personal hygiene, field sanitation and first aid. (4) Maintain such records and make such reports as may be required. (5) Conduct sanitary inspections of water, kitchens, garbage, latrine and bath installations. (7) Recommend sanitary procedures and precautions necessary to preserve the health of the command. And (8) Establish a regimental aid station.

(*e*) *The Battalion Surgeon.*—In general, the duties of the battalion surgeon with the battalion are analogous to those of the regimental surgeon with the regiment.

2. **Medical Officer of a Ship.**—The ship medical officer is directly responsible to the commanding officer in all matters relating to medical service within the ship. In addition to his normal duties, the ship medical officers of troop carrying vessels in amphibious operations have the following responsibilities.

(*a*) *Prior to embarkation of troops.*—(1) Verify and complete immunization of all ship's personnel; (2) develop and maintain battle readiness of the medical department; (3) Prepare plans for the reception, care, and evacuation of casualties; (4) recheck ship's sanitary bill for troops.

(*b*) *After embarkation and until debarkation of troops.*—(1) Coordinate the medical activities of troop medical personnel with that of the ship's medical department; (2) designate the extent to which the ship's medical facilities are available to troops; (3) assume responsibility for all patients on the sick list (in sick bay) whether from attached or embarked personnel, until they are returned to duty or transferred. Embarked medical personnel are responsible for the preparation of any medical records these patients may require; (4) indoctrinate all ship's medical personnel in the task of the operation and medical mission, within the limits of security. The responsibility for malaria prophylaxis of embarked troops rests with the commanding senior of those troops. The responsibility for the procurement of adequate supplies of atabrine rests with the Medical Officer of the ship.

(*c*) *Upon debarkation of troops in an assault.*—Make specific preparations for casualty reception, treatment, and evacuation.

3. Additional Duties of Landing Force Medical Officers.—

(*a*) *Prior to embarkation on troop carrying vessels.*—(1) Verify and complete immunization of landing force personnel. (2) Recheck medical material for combat loading. (3) Confer with ship's medical officer.

(*b*) *Upon embarkation and until debarkation.*—(1) Verify berthing of the landing force medical personnel. (2) Recheck and verify combat priority loading of medical material. (3) Provide the ship's medical officer with a roster of embarked landing force medical personnel. It is the responsibility of the ships senior medical officer to provide the medical supplies as well as the medical care and the necessary medical records for the troops embarked. The landing forces medical personnel will give him whatever assistance he needs in caring for the troops but this in no way relieves him of responsibility in the matter. (4) Integrate medical activities with the ship's medical department. (5) Indoctrinate landing force medical personnel in the task of the operation and medical mission, within the limits of security. (6) Verify details of readiness for debarkation.

4. Duties of the Shore Party and Beach Party Medical Officers.—As currently organized, medical service in the beach area is provided by a special task organization of the landing force. This organization, the shore party, is composed of personnel from both the forces afloat and the landing force. It is charged with the following duties:

(*a*) First aid to personnel in the vicinity of the beaches.
(*b*) Supervision of seaward evacuation of casualties.
(*c*) Establishment and operation of casualty evacuation stations.
(*d*) Collection of casualties in the beach areas.

(*e*) Loading of all craft and amphibious vehicles for seaward evacuation.

(*f*) Search casualties and remove all ammunition, grenades, explosives, etc., prior to loading for seaward evacuation.

5. Medical Service Afloat—Assault Phase.—

5.1 *Principles of Casualty Handling Afloat.*—Medical service in the forces afloat will be accomplished in a normal manner except when peak loads of casualties occur. If facilities become overtaxed, casualties will, when possible, be evacuated to other vessels in accordance with the medical plan. Sea rescue and the handling of survivors will be effected in accordance with the established procedures of the Navy. Special craft may be assigned this task. Vessels designated and/or able to receive casualties will display a suitable sign or signal as indicated in the operation plan. Any amphibious vehicles or landing craft used in the assault may be utilized to evacuate casualties from the beach. They will carry sufficient medical material for emergency first aid to be administered by the boat's crew or medical personnel, if aboard. Casualties resulting from injuries or wounds sustained in assault craft or vehicles will normally be retained for seaward evacuation. All remains of dead will, when practicable, be taken ashore for burial.

5.2 Receipt of casualties aboard casualty carrying vessels must be planned and accomplished in a manner to provide expeditious casualty loading under all conditions, i. e., while the vessel is combat loaded, is unloading or operating under adverse weather conditions.

The traffic control organization afloat is responsible for effecting an equable distribution of casualties among the casualty carrying vessels. The medical plan generally provides the information of ship capacities but special problems are bound to occur, some of which are:

(*a*) Ships designated to receive certain type of casualties are not present.

(*b*) Overloading of some vessels both in numbers and type of casualties.

(*c*) Ship movement.

(*d*) Inability of the boat coxswain to locate or recognize the ship to which his casualties are consigned.

(*e*) Ships not accepting casualties from landing craft.

The solution of these problems is dependent on teamwork among all members of the evacuation chain. Every unit must be prepared to function under maximum capacity loads. The difficulties listed above as (*a*), (*b*), and (*c*) must be overcome by the traffic control organization afloat to which a medical representative of the amphibious group (see par. 1.1 (b)) is assigned for the assault. The difficulty presented in (e) above must be met by individual ship medical officers, i. e., if his ship has attained a maximum capacity casualty load then he must ascertain where other facilities for the receipt of casualties are available and arrange for their reception.

5.3 *Casualty Loading Methods.*—

(*a*) Vessels without bow ramps may: (1) Hoist craft in davits for rail level unloading; and (2) hoist casualties from craft alongside the vessel by litter slings suitable for pole or Stokes litter and by Salmon board.

(*b*) Vessels with bow ramps may utilize the above method, plus loading over the ramp by: (1) Marrying ramp with that of the casualty carrying craft; (2) amphibious vehicles; and (3) direct contact with land, rhino ferry, barges, etc.

5.4 *Synopsis of Casualty Handling Principles in Assault Transports Based on Action Reports.*—

(*a*) The assault transport engaged in an amphibious operation must be prepared to care for any type of casualty. The treatment required varies from emergency first aid through life-saving surgery and, at times, may include definitive measures.

(*b*) Watch, quarter and station bills, based on the ship's battle bill must provide for the handling of casualties.

(*c*) The authorized medical complement of an assault transport is generally adequate to perform all normal functions of the medical department. However, during the stress of large scale casualty evacuation, particularly in the assault phase of an amphibious operation, the magnitude of the task is such that it often becomes an "all hands" evolution with personnel from all departments of the ship participating. By the use of non-medical personnel for stretcher bearing, recording, messing, etc., medical personnel will be freed to accomplish first aid, treatment of shock, administration of plasma, surgery, laboratory, x-ray, nursing, etc.

(*d*) *Organization and Duties.*—

(1) For embarkation and debarkation of casualties: Generally a duty of the deck force with medical supervision.

(2) For stretcher bearers: These may be furnished by a deck or supply division.

(3) The receiving ward (collecting station): Each transport should provide a minimum of one main and one auxiliary receiving ward for casualty reception. As received, casualties are recorded, stripped, examined and treatment is started. Disposition from this ward may be retention, to wards, surgery, x-rays, etc.

(4) Operating teams: It is advisable to have two or more teams with a plan for rotation of services. The dental officer generally serves as the anesthetist and handles oral surgery.

(5) Records: While basic principles remain constant the techniques of casualty recording and reporting during the assault and later phases of amphibious operations are generally tailored to meet specific operational requirements. It has been recommended that accurate recording be initiated in the receiving ward and that this duty be assigned to a competent hospital corpsman. In addition to this duty: (a) he receives, receipts for and places in safe-keeping, the

patient's valuables turned over to him, and (b) he sees that all small arms, live ammunition, grenades, explosives, etc., not previously collected by the gunnery department are turned over to a representative of that department. Additional recorders may be acquired from the ship's company. However, if so assigned, such personnel must be thoroughly instructed.

(6) Shock, blood and plasma teams have been organized on some transports.

(7) Nursing is generally a duty of the ward corpsmen. Aids from non-medical personnel may be required.

(8) Feeding: When evacuating large numbers of casualties, this detail may be assigned to mess cooks under medical supervision.

(9) Supplies must be kept continually stocked and readily available for issue. This assignment must be made to a competent hospital corpsman with trained reliefs available.

5.5 *The LST.*—

5.5.1 Operational expediency oftentimes dictates employment of LSTs as casualty carriers in certain amphibious operations. LSTs are primarily assault vessels but may be given the mission of casualty carrying. Some of the factors affecting the technique of employment of these vessels as casualty carriers are:

(*a*) Type and degree of casualty conversion.

(*b*) Medical material on board.

(*c*) Medical personnel on board.

(*d*) Type and degree of medical service planned.

(*e*) Availability of other types of casualty carriers such as AHs, APAs, etc.

(*f*) Hydrographic and terrain features of the assault area.

(*g*) Distance from base.

(*h*) Combat employment of these vessels including type cargo, operational phasing, period within the assault area.

At other times operational considerations dictate the use of stationary LSTs as casualty evacuation control ships where they take on some of the functions of the medical beach party and some of the functions of a traffic control ship. The use of LSTs in this capacity is especially indicated where the beach stays "hot" for a prolonged period, and when there is an intervening reef between transports and the beach. A pontoon secured alongside the LST allows triage and recording of casualties in boats coming alongside. To fit these ships for this purpose, certain interior changes must be made and the medical department complement increased; also, when so designated, allocation of a casualty evacuation control communication channel is necessary.

5.5.2 Watch, quarter and station bills, based on the ship's battle bill should provide for the handling of casualties whether sustained within the ship or received from other sources. The normal medical complement

of LSTs is two hospital corpsmen. There is a medical officer on the group commander's staff. Additional medical personnel are temporarily assigned for a casualty carrying mission. Specific allowance tables have not as yet, been prepared. Action reports from one major landing showed an operational requirement of 3 medical officers and 22 corpsmen. Of these, 1 medical officer (surgeon) and 2 corpsmen (surgical technicians) were relieved from LST duty at the end of the fluid assault stage. Other action reports vary in the operational assignment of 1 medical officer and 10 corpsmen to 4 medical officers and 40 corpsmen. In one theater, surgical teams of 2 medical officers and 10 corpsmen with their supplies and equipment are molded into a mobile unit for LST and other assignments.

5.5.3 In large scale casualty evacuation, the efficiency of medical service depends upon proper organization for the task. The primary mission becomes that of a casualty evacuation vessel and all available non-medical personnel are needed.

5.5.4 General organization and duties:

(*a*) For embarkation and debarkation of casualties. Generally a duty of the deck force.

(*b*) Casualty loading:

(1) Through the ramp.

(2) Hoisted.

i. Boat hoisted in Welin davits to rail level.

ii. Casualties hoisted from boats or amphibious craft alongside the LST.

5.5.5 *Suggestions for accomplishing casualty hoisting from craft.*— Small craft will come alongside the LST as directed by the Commanding Officer. Bunk straps will be lowered to the small craft and used to secure the patient to the litter. This will be done by the crew of the small craft. The sling (for drawing, see page 18) will be lowered from the LST to the craft alongside and its crew will attach it to the litter by sliding the handles of the litter through the loops of the sling. There will be two guide lines, one attached to each 2 by 4 beam at the loop. These lines, handled by a crewman in the small craft, steady the litter during its ascent and hold it parallel to the side of the LST, until the litter reaches the ship's deck level.

One after davit on each side of the LST will be rigged to a jigger (double block above and single block below—see drawing on page 19) secured to the lizard of strong back between the arms of the davits. The davits are lowered to the point, and left in that position, at which the sling will be in the middle of a LCVP tied alongside. This position will be satisfactory for all craft. The sling, preferably with the 2 x 4 beam attached, and the bunk straps are lowered into the small craft and handled as described above. The commanding officer of the LST will assign suffi-

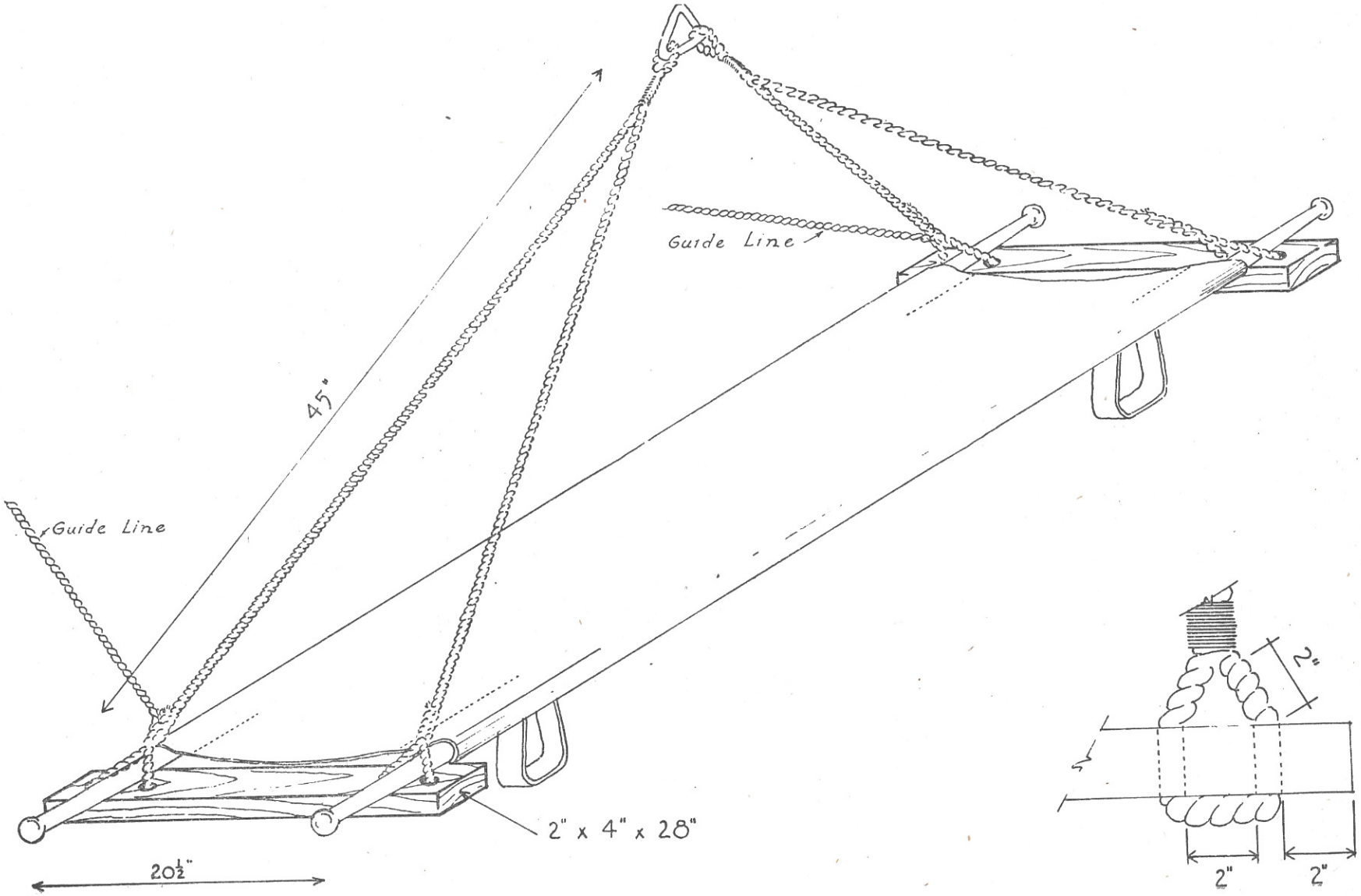

FIGURE 2.—*Sling used in LST evacuation*

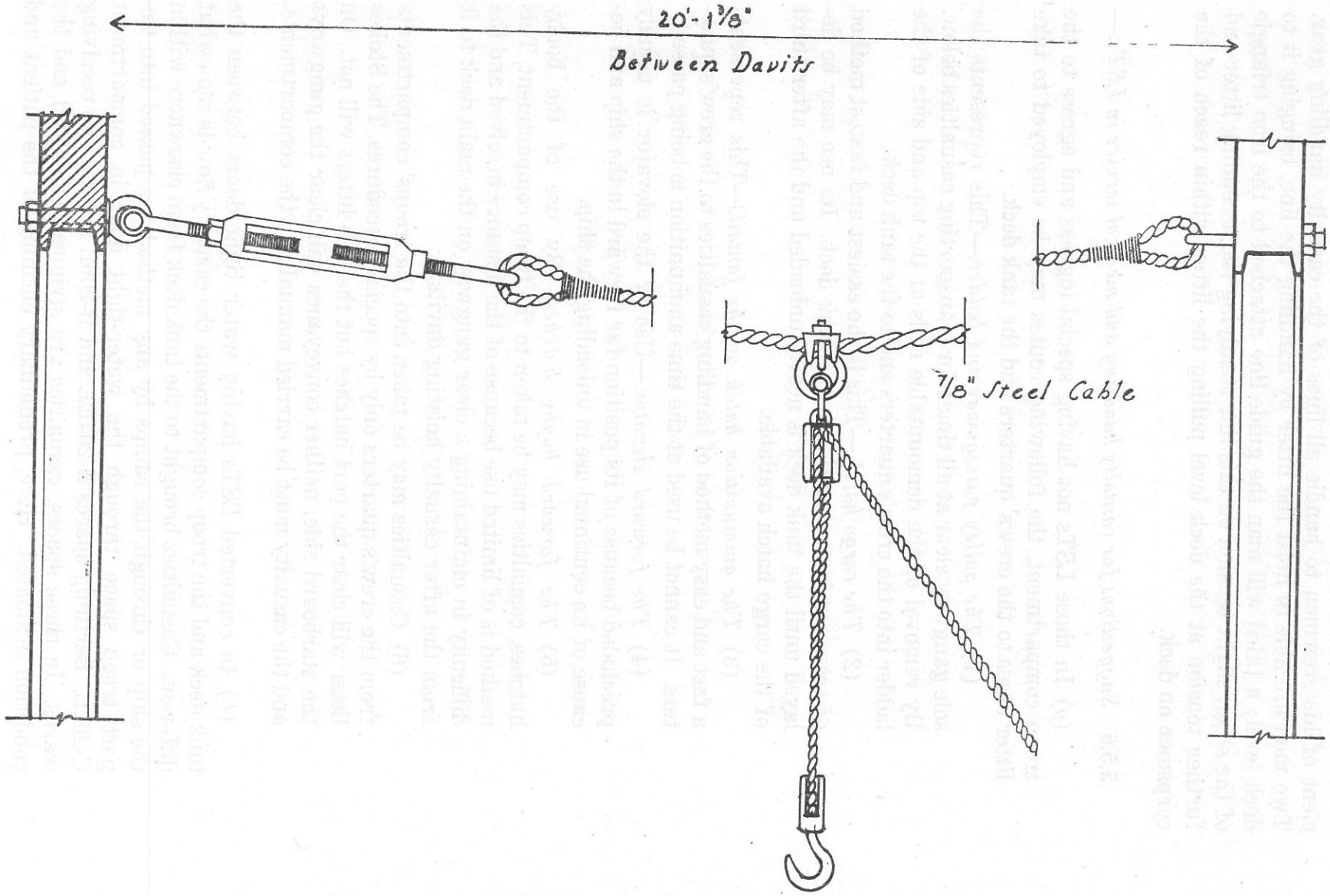

FIGURE 3.—*Jigger used in LST evacuation*

cient of his crewmen to handle all lines of the casualty handling gear. Two men are able to hoist the litter by handling the line, bringing it to deck level; a third will man the guide line attached to the iron triangle of the sling, slight tension on this line steadying the ascending litter and further tension at the deck level pulling the litter within reach of the corpsmen on deck.

5.5.6 *Suggestions for casualty handling and medical service in LSTs.*—

(*a*) In those LSTs not having special ingress and egress to the troop compartment, the following routes may be employed to take litter cases to the crews' quarters and the tank deck.

(1) *The galley passageway and ladder.*—This represents the sole gangway clear at all times for transporting casualties below. By removal of the demountable rails at the top and side of the ladder into the crew's quarters and to the tank deck.

(2) *The cargo hatch.*—This is the easiest and fastest method of transporting casualties to the tank deck. Its use may be delayed until the tank deck is nearly unloaded and the after third of the cargo hatch available.

(3) *The ammunition hatch on the fantail.*—This represents a fast and easy method of handling casualties to the crew's quarters. It cannot be used at the time ammunition is being passed.

(4) *The forward elevator.*—Use of the elevator is usually precluded because of its position far forward in the ship and because of its continual use in unloading the ship.

(5) *The forward booby hatches.*—By use of the booby hatches, casualties may be taken to the troop compartment. This method is of limited use because of the distance involved and the difficulty in maintaining a clear gangway on the main deck to it from the after casualty hoisting davits.

(6) Casualties may be taken into the troops' compartments from the crew's quarters only by special procedures. The Stokes litter will clear the port hatches but the pole litters will not. On the starboard side, neither conveyance will clear the gangways and the casualty must be carried manually to the compartments.

(*b*) In converted LSTs having water tight doors between the tank deck and the troop compartments the casualty flow is somewhat different. Casualties brought to the tank deck from elsewhere within the ship or through the ramps by any method are passed into the port troop space through the water-tight door in compartment C-202L. Berthing spaces B-204EL and B-206L are used as receiving wards. In these spaces, casualties are stripped, examined and the condition evaluated. Here, preliminary cleaning of the patient and

preoperative care are given. Compartment C-216L which is the casualty washing station adjoins the receiving ward. Duty cases may be cleaned up at this point. When the triage surgeon, who is responsible for sorting cases, deems them ready for definitive surgery, they are taken to the operating room in compartment A-214L. After surgery, the flow continues forward to the berthing spaces A-212L, A-210, A-208L and A-206L which are used for clean surgical wards. The proper distribution of casualties may be facilitated by one medical officer of the team being stationed on the tank deck abreast compartment C-202L to treat minor casualties and direct the proper flow into the port spaces. Only the more serious cases requiring definitive surgery should be passed into this space. The others, particularly ambulatory cases, should be treated at the station on the tank deck and directed into the starboard troop spaces for berthing.

(*c*) *The Receiving Ward (Collecting Station).*—The location of this area will depend upon the type conversion of the vessel. The officer's wardroom has been used in some LSTs for casualties received over the side. On recent changes, compartment C-202L has been designated as an examining room and B-204-EL with B-202L as casualty receiving wards.

(*d*) *Operating Room and Operating Teams.*—On some LSTs, the operating platform in the after tank deck area has been used for this purpose.

The sterilizer, operating table, operating light and shelves may be arranged on the platform. Stands, cabinets and shelves may be rigged to complete this area for appropriate surgery. This platform cannot be used until the tank deck has been at least two-thirds unloaded of vehicles.

On certain LSTs, the crew's quarters serves as the operating room. In a recent directive compartment A-216L has been designated as a casualty washing station, scrub-up and sterilizing room, compartment A-214L as the operating room. This will be accomplished during construction in new ships and during availability period of others.

Operating teams may be placed on board or organized from the available medical personnel.

(*e*) *Records.*—Casualty recording will be in accordance with current directives. It is desirable that they be accurate. This can be best assured by the detailing of a competent and trained pharmacist's mate to this detail.

(*f*) Provisions should be made for shock, blood and plasma administration.

(*g*) *Nursing.*—Authorized alterations will make troop compartments available for stretcher cases. The tank deck will accommodate approximately 150–200 litters by arranging them in rows

of 10 athwartship and 15 down the deck. Litters may be secured by lugs at the bottom of the bulk heads and middle of the tank deck. Access to all patients must be planned in the arrangement of the aisles. In the LSTs with litter brackets on the tank bulkhead, approximately 140 cases can be accommodated. The two lower brackets of each tier are suited for shock position and administration of plasma. Litters should be lashed to the brackets.

(*h*) *Feeding.*—Frequently it will be necessary for the master-at-arms to assign messmen for this detail.

(*i*) *Supplies.*—A competent corpsman should be trained in the duties of property and supply. He is responsible for all problems of medical supply.

6. Medical Service, Landing Force, Assault Phase.—

6.1 *Battalion Landing Phase—Battalion Beach*—Diagrammatic Sketch, p. 24.)

6.1.1 Medical facilities:—Infantry battalion medical section, including company aid men, battalion aid station personnel, and other assigned personnel.

6.1.2 Operation:—

(*a*) Landing of all elements is in accordance with the boat assignment tables.

(*b*) *Company aid men*—with the platoon to which attached.

(*c*) Battalion aid station personnel generally land in two or more sections, with elements of the battalion headquarters.

(*d*) The battalion medical officers are responsible for the care, treatment and evacuation of casualties to the beach area, during this phase.

6.2 *Regimental Landing Phase — Regimental Beach.* — Diagrammatic Sketch, p. 25.)

6.2.1 Medical facilities:—

(*a*) Three infantry battalion medical sections.
(*b*) One regimental medical section.
(*c*) One medical section, shore party pioneer company.
(*d*) One collecting section from medical company.
(*e*) Three medical sections, naval beach party (APA's).

6.2.2 Operations:—

(*a*) The infantry battalion medical sections land as shown in the battalion landing phase.

(*b*) The regimental aid station lands in two or more sections, with elements of the regimental headquarters.

(*c*) Medical units of attached troops (amphibious tractors, tanks, engineers, motor transport, etc.) will normally land with the the headquarters of their respective units and will be employed by prearranged plan and as may later be modified by the tactical situation.

(*d*) The battalion medical elements operate in support of their units. The regimental aid station locates in a position of the main axis of evacuation preferably near its regimental headquarters to support the battalion aid stations.

(*e*) The medical sections of the shore party, assisted by the collecting sections of the medical company and the beach party medical sections establish evacuation stations in the vicinity of the beaches in support of each battalion landing team. These evacuation stations with their personnel provide medical service in the vicinity of the beaches.

6.2.3 Logistic Support:—

(*a*) Unit to be supported—Battalion aid stations.

(*b*) Source of medical material: (1) Collecting section, medical company; (2) Beach party medical sections.

(*c*) Source of medical personnel—as provided for in Medical Plan.

6.3 *Divisional Landing Phase — Divisional Beach.* — (Diagrammatic Sketch, p. 26.)

6.3.1 Medical facilities:—

(*a*) Nine infantry battalion medical sections.
(*b*) Four artillery battalion medical sections.
(*c*) Three infantry regimental medical sections.
(*d*) One artillery regimental medical section.
(*e*) Three medical sections, shore party pioneer battalion.
(*f*) Nine medical sections, naval beach party (APAs).
(*g*) Attached medical units of headquarters battalions, service battalion, tank battalion, engineer battalion, motor transport battalion, and pioneer battalion.
(*h*) Medical battalion.

6.3.2 Operation:—

(*a*) With the beginning of this phase, casualty evacuation becomes organized and channelized. Consolidation of evacuation points becomes possible.

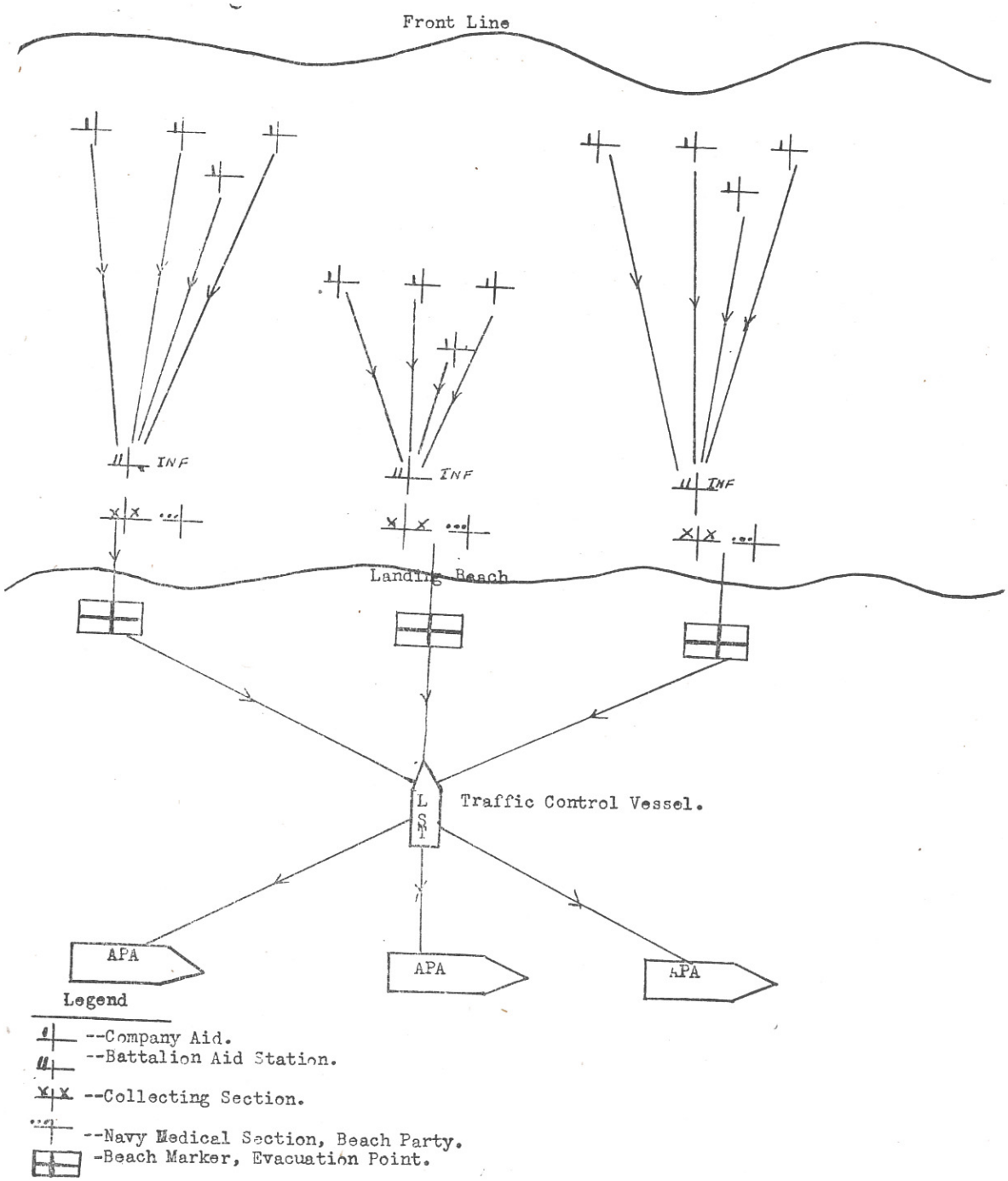

FIGURE 4.—*Battalion landing phase*

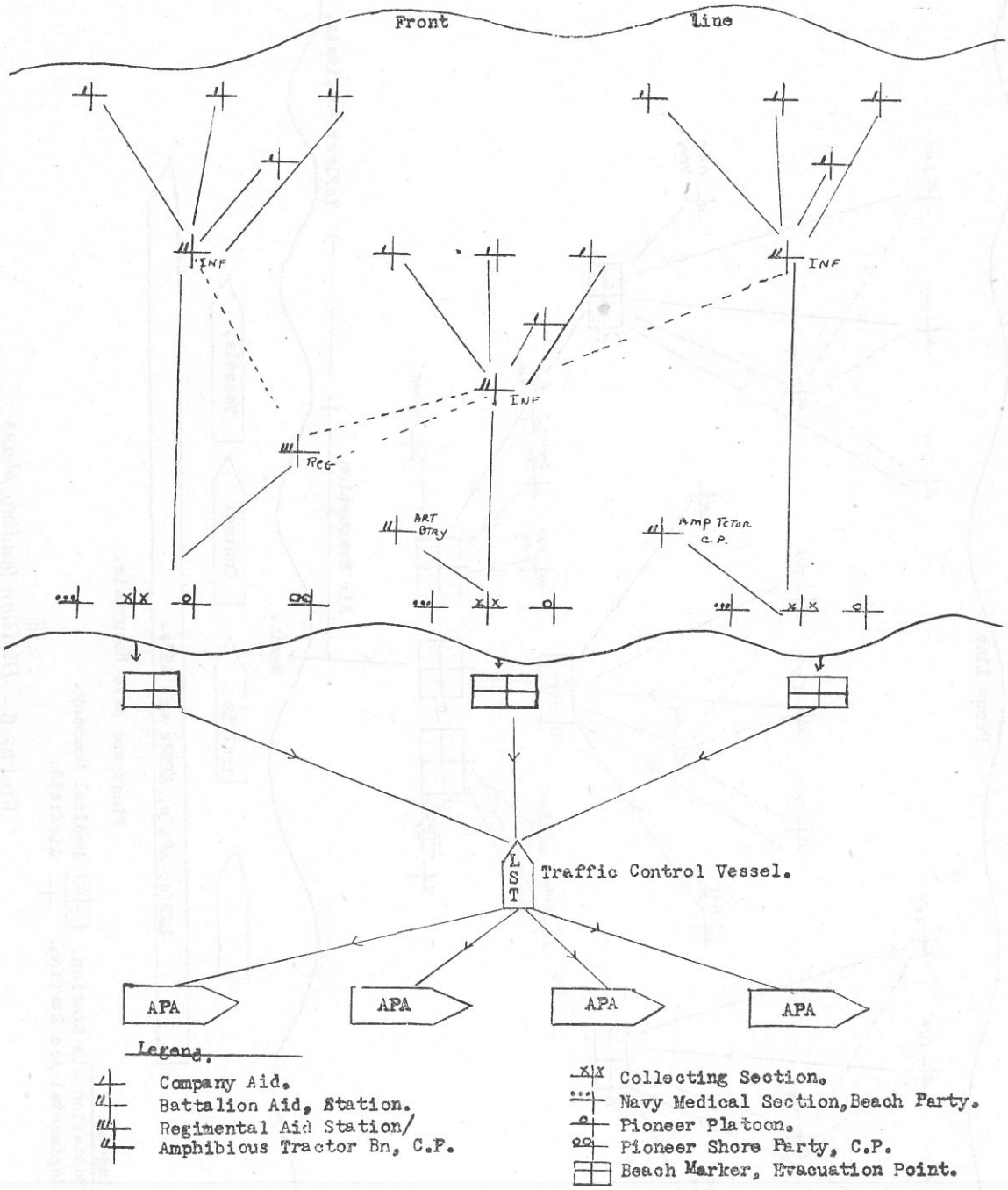

FIGURE 5.—*Regimental landing phase*

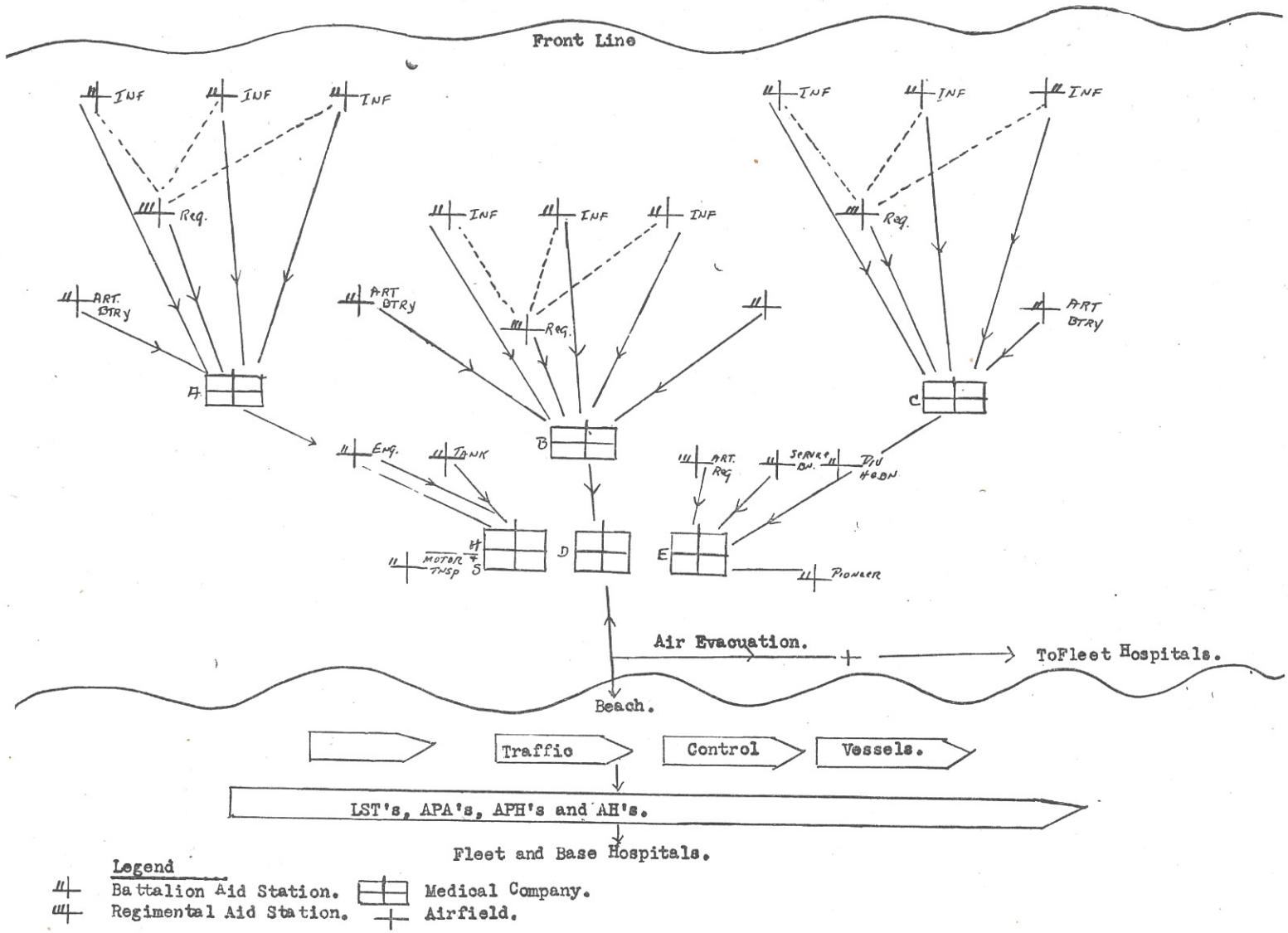

FIGURE 6.—*Division landing phase*

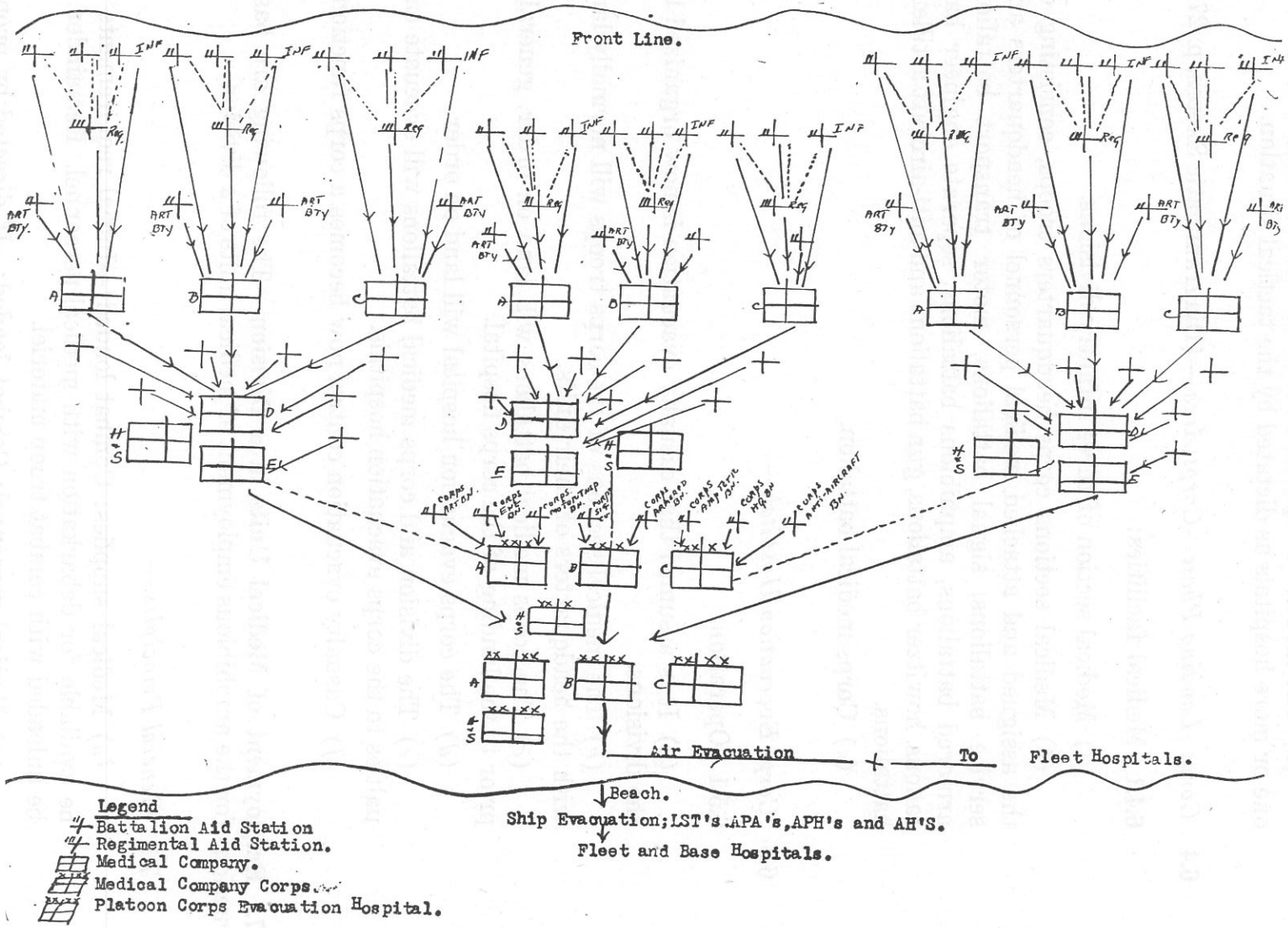

FIGURE 7.—*Corps landing phase*

(*b*) Evacuation control is the responsibility of the division surgeon during this phase.

(*c*) The medical companies will be landed on order, and operate one or more hospitals as dictated by the tactical situation.

6.4 *Corps sLanding Phase—Corps Area.*—(Diagrammatic Sketch, p. 27.)

6.4.1 Medical facilities:

(*a*) Medical section of three infantry divisions.

(*b*) Medical sections corps headquarters troops, consisting of the assigned and attached medical personnel of headquarters and service battalions, signal battalions, motor transport battalion, armored battalions, amphibious battalions, separate engineer battalions, howitzer battalions, gun battalions and anti-aircraft artillery battalions.

(*c*) Corps medical battalion.

6.5 *Corps Evacuation Hospital.*—

6.5.1 Operation:

(*a*) It is assumed that casualty evacuation is now organized by the divisions.

(*b*) The medical sections of the corps troops will normally land with the headquarters of their units.

(*c*) The corps medical battalions will land on order, generally prior to the landing of the corps hospital.

(*d*) The corps evacuation hospital will land on order.

(*e*) The division and corps medical battalions will evacuate casualties to the corps evacuation hospitals.

(*f*) Casualty evacuation control now becomes a corps function.

7. **Employment of Medical Units in a Division.**—The following are basic instructions for the amphibious employment of medical units of a division.

7.1 *General Principles.*—

(*a*) Medical supplies: Combat loaded:—Initial requirements to be available for debarkation with medical personnel. Remainder to be unloaded with combat troop materiel.

(*b*) Medical personnel: Combat loaded:—If directed by proper authority, they will be armed for self defense.

7.2 *Ship to Shore.*—

(*a*) Medical personnel will land as follows:—

(1) In approximately same wave as headquarters to which attached; except that company aid men will land with their respective platoons:

Battalion aid station.
Regimental aid station.
Medical personnel with division troops.
Collecting section—advanced echelon.

(2) Earliest possible time following shore party command group:

Shore party medical personnel.
Collecting section.

(3) When tactical situation permits:

Hospital section.
Medical battalion.
Special units, if any, such as malaria control.

(*b*) Supplies and equipment. (See paragraph 7.5.)

7.3 *Ashore.*—

(*a*) Company aid corpsmen will give the wounded emergency treatment in company zone of action and will tag casualty with E.M.T.

(*b*) Battalion aid station using personnel designated by the battalion commander (turned over well in advance and trained for the job) will evacuate casualties from front line to battalion aid station.

(*c*) Regimental aid station will establish along line of drift from battalion aid station, preferably near the regimental command post, and will coordinate evacuation in this area during the regimental phase.

(*d*) Landing team, shore party evacuation station will be composed as follows:

(1) Collecting section medical company, one medical officer and eleven corpsmen, three marines and one jeep ambulance (combat loaded).

(2) Pioneer platoon, two corpsmen.

(3) Medical section, naval beach party (APA) one medical officer and eight corpsmen.

NOTE: Some variation of this composition is possible at the discretion of the Division Surgeon who may retain the medical officer of the Collecting Section, Medical Company for employment with the Hospital Section of the Medical Battalion. He may also detach the medical personnel from

the Engineering and Amphibian Tractor Battalions and employ them with the Pioneer Platoon as Shore Party personnel.

(*e*) The following are assigned duties at shore party evacuation station:—

(1) Medical officer collecting section medical company: Segregation and treatment of casualties at shore party evacuation station.

(2) Medical officer pioneer company:

Coordination of evacuation stations and report to division or shore party commander on evacuation. Treatment of casualties occurring in his immediate area.

Designation of corpsmen to record patients evacuated (data to include name, organization, diagnosis, and serial number).

(3) Medical officer collecting section and medical officer pioneer company:—Litter, blanket and splint exchange.

(4) Medical section, naval beach party (APA):—

Assist in evacuation of casualties, under control of shore party medical officer, and in addition, assist collecting section.

Litter, blanket, and splint exchange.

(*f*) Collecting Section and Shore Party medical personnel:

(1) Assist in the formation and functioning of the shore party evacuation station as noted in (d) above until detached by order of the division surgeon for employment with the hospital section, medical company, medical battalion, or division hospital.

(*g*) Medical battalion, less three companies:

(1) Establish division hospital and be prepared to receive, treat, and evacuate patients from units in the area, or to relieve other medical companies when necessary. Their ambulances will be available to aid casualty evacuation from all units which they serve. When established, the following will be notified:

Division surgeon via commanding officer medical battalion. Any unit served. The Hospital Section of the three Medical Companies who are attached to the three Regimental Combat teams revert to Division control upon order, on the landing of the Division Headquarters. These may be employed to augment the Division Hospital at the discretion of the Division Surgeon.

(*h*) Malaria control unit will unload on order. For duties, see S.O.P. malaria control.

7.4 *Instructions to Medical Personnel.*

(*a*) *Employment in Combat.*

(1) Medical officers will remain with their aid stations during combat.

(2) Medical personnel will take same precautions regarding concealment, camouflage and local security as combat troops.

(*b*) *Handling Casualties.*

(1) Attach emergency medical tag to all casualties when first treated. Fill in name, organization, serial number, nature of wound and treatment.

(2) Battalion, regimental and shore party medical sections will log all casualties passing through, showing name, organization, serial number, nature of wound, injury or sickness and disposition. All information concerning killed will be recorded.

(3) Shore party evacuation station will classify wounded in accordance with method of transportation and expected recovery:

Ambulatory.
Stretcher.
Nontransportable.

(4) Casualty reports will be made through normal channels to division.

(*c*) *Chain of Evacuation.*

(1) Through battalion aid station to beach, to ship, or to medical company when established ashore.

(*d*) *Exchange of Supplies.*

(1) Particular attention will be given to exchange of litters, blankets and splints, between battalion and regimental aid stations, shore party evacuation stations, forces afloat or hospitals.

(*e*) *Disposition of Dead.*

(1) All dead will be tagged, collected, and disposed of as directed.

(2) The graves registration section plus two dental technicians from combat troops will function under direct control of graves registration and/or the quartermaster with the assistance of the chaplains. Two NMS Form N's will be prepared and in case of dead who cannot be definitely identified otherwise, NMS Form H-4 (dental chart) will be prepared and securely attached to original certificate of death.

7.5 *Supplies and Equipment.*—

(*a*) *Individual:*

(1) Medical officer ---------- Field Medical Unit "One".
(2) Dental officer ---------- Field Medical Unit "Two".
(3) Hospital Corpsman ---------- Field Medical Unit "Four".
(4) Hospital Corpsman (dental) ---- Field Medical Unit "Three".

(*b*) *Battalion Aid, Infantry.*

(1) Two jeep ambulances, combat loaded.

(2) Units "one" to "five" inclusive. Two units "six". Three units "seven". Four units "nine". One unit "ten".

(3) Sick call chest.

(4) Bulk supplies—packed in waterproof pouches.

Battle dressings, large	100
Battle dressings, medium	200
Battle dressings, small	300
Benzedrine	——
Sulfa drugs, powder and tablets	——
Morphine syrettes, packet	50
Plasma	60
Plywood leg splints	12
Plastic arm splints	6

(Battalion and station will be divided two ways and loaded in landing craft).

(*c*) *Regimental Aid, Infantry.* Same as battalion aid, infantry.

(*d*) *Artillery Regiment, Headquarters and Service Battery and Artillery Battalions.* Same as battalion aid infantry, less one jeep ambulance.

(*e*) *Special and Service Troops.*—Same as battalion aid infantry, less one jeep ambulance.

(*f*) *Collecting Section* (medical company):

(1) Same as battalion aid infantry, less one jeep ambulance and sick call chest.

(2) Additional aid station equipment: 120 units of plasma, 5 expeditionary cans, 1 Lyster bag and 1 utility box.

(3) Twenty percent bulk supplies of medical company.

(*g*) *Medical Company—Less Collecting Section:*

(1) Initial group:

One jeep ambulance, combat loaded.
Two 4 x 4, 1-ton trucks, combat loaded.
One 6 x 6, 2½-ton truck, combat loaded.
Two field ambulances, combat loaded.
One trailer, water.
One 1-ton trailer, cargo.

(NOTE: Combat loaded equipment will include a portable surgery with necessary instruments and sterile packs to enable them to perform abdominal surgery within first 24 hours—50 stretchers, 50 blankets, 50 cots, and 4 tarpaulins.)

(2) Secondary group: Remainder of equipment and supplies of 144 bed hospital included in number one priority.

(3) Forty percent bulk supplies of medical company.

(*h*) *Medical Battalion—Less Three Medical Companies.*

(1) Headquarters and service company: One jeep. Office equipment.

(2) Two medical companies: Supplies and equipment for two medical companies. When additional medical company is assigned to infantry regiment or artillery regiment, their supplies and equipment will be divided as medical companies normally with infantry regiment.

8. Planning of Evacuation of Combat Casualties by Air Transport:

8.1 The task force plan and medical plan supporting the proposed operation should make provision for lifting patients out of assault area during early and late phases of amphibious operations, by employing flying boats in early phases wherever operationally possible and by employing land based transport aircraft as soon as air fields are placed in operation.

8.2 Since sea planes require establishment of seadrome facilities and sea plane tenders for servicing, fueling, supplying of relief crews, messing, etc., air evacuation of casualties by this means requires that it be a planned operation.

8.3 Staff medical officers attached to air evacuation squadrons or task units must be advised of so much of the task force medical plan as to enable them to plan this operation.

9. Air Evacuation of Casualties:

9.1 *Premise.*—That with but few exceptions most combat casualties as well as most sick patients can be evacuated by air.

(*a*) Altitudes of flight are determined by such factors as passage over enemy lines, which is sometimes unavoidable, passage over mountain ranges or over weather, and passage across lakes or oceans. In over water evacuation special flights may be arranged at low altitudes for types of injuries or diseases wherein altitude effect upon the patient would be disadvantageous.

(*b*) It must be emphasized that patients should be carefully selected for air evacuation.

(*c*) Planes flying patients must be equipped and manned for the proper execution of the mission.

9.2 *Standing Operation Procedures.*

(*a*) Routine evacuation of casualties by aircraft will take place between forward area landing fields or seadromes and the base area, i.e., between combat area and the nearest forward area mobile or advanced base hospitals. Whenever the operation is a joint or combined army-navy operation, a collecting or "holding center" may be set up by the army alongside landing fields, in which case this facility will serve as a point of departure.

(*b*) Casualties collected in the very forward areas will flow through the chain of evacuation as established in amphibious medical doctrine. As evacuation by air transport becomes effective, normal triage of casualties will further classify such transportables as are evacuable by air. A flight surgeon should be available to the medical activities responsible for such triaging to advise in the selection of casualties to be evacuated by this means.

(*c*) A flight surgeon will supervise loading of all casualties evacuated by air. He is also responsible for keeping a record of such evacuees. This record will include: Name, organization, serial number, diagnosis and such other information as is deemed pertinent on each evacuee. The mechanics by which this system of recording is accomplished depends entirely on local organization. However, this may be done by the medical officers attending casualties at the air strip loading point attaching a record (EMT in duplicate) to each casualty prior to embarkation and the medical officer at the airport retaining the duplicate for record.

9.3 *Suggested Criteria for Triage.*

(*a*) Selection of cases should be based on: (1) Seriousness of the injury; (2) altitude to be reached in flight; (3) presence of abdominal distension of pneumo-pulmonary wounds; (4) distance to be flown, and destination.

(*b*) Contra-indications: (1) Cases with respiratory embarrassment (pneumonia-traumatic pneumothorax-diaphragmatic hernia- mediastinal emphysema-maxillo-facial injuries producing serious respiratory embarrassment-marked anemia or exsanguination); (2) abdominal injuries (abdominal injuries with bowel perforation); except immediately following successful surgical measures and exteriorization; or after 12 days' post-operative care and recovery); (3) shock and hemorrhage (shocked cases or cases of serious hemorrhage, not fully controlled); (4) certain head injuries with exposure or protrusion of brain tissue and in extremely critical condition; (5) unsplinted fractures and massive wounds which have not been properly dressed; and (6) maniacal, hysterical or seriously mentally disturbed cases, until symptoms have been controlled by proper sedation.

10. General Data.—

10.1 *Procurement Sources of Medical Material.*—Instructions for procurement of medical material are found in chapter 20, Manual of the Medical Department and in the orders of area commanders. Local information may be obtained from any base medical officer.

(*a*) Normally, medical material may be procured from: (1) Naval medical supply depots; (2) Navy medical supply storehouses; and (3) Marine base depots and specified field depots.

(*b*) Emergency issues of medical material may be obtained from:—

(1) Any United States Navy vessel, medical activity, or Marine Corps activity;

(2) United States Army medical activities; (3) other U. S. Government activities;

(4) Captured medical material; and (5) Allied naval vessels or bases.

10.2 *Operational Casualty Records and Reports.*

While basic principles remain constant, the technique of casualty reporting in amphibious operations must be tailored to meet specific operational requirements.

The general policy of casualty reporting should be determined early in the planning stage. However, the actual mechanics of accomplishment require a great deal of study and a constant guard be maintained to keep the system from becoming impractical.

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One efficient system developed for a recent major amphibious operation is presented for information:

As used in this text, "far shore" represents the target beaches and "near-shore", those friendly shores from which the attack was launched. "Shuttle control", the command afloat responsible for controlling the departure of vessels from the combat zone, returning to near-shore ports. Reports, or parts of reports indicated by an asterisk, are not medical but were included as additional related personnel information for addressees concerned.

All task force vessels and near-shore medical activities submitted casualty reports to a near-shore central casualty recording and screening section. This section then made all reports required by the Navy Department.

A medical representative, stationed at each near-shore casualty debarkation port, was charged with contacting every vessel on its arrival and with the forwarding of its casualty (evacuation) report, by courier, to the central section.

Report No. 1.:	Numerical Report of Casualties.
From:	All casualty carrying vessels departing the combat zone.
To:	Shuttle Control.
Transmitted by:	Voice or signal.
When submitted:	Prior to departure of vessels from far-shore area.
Information contained:	Total wounded on board. Number of stretcher cases. *Other evacuees, noncasualty.
Purpose of report:	To provide shuttle control with the number of casualties in individual ships for further reporting to near-shore command in convoy totals (see next report).

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Report No. 2.:	Numerical Report of Casualties.
From:	Shuttle control.
To:	Appropriate near-shore commander.
Transmitted by:	Despatch.
When submitted:	Upon departure of convoy from far-shore area.
Information contained:	Convoy or ship totals of wounded, stretcher cases and * other evacuees (noncasualty).

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Report No. 3.:	Numerical Report of Casualties.
From:	Far-shore (air) evacuation officer.
To:	Appropriate near-shore air commander responsible for casualty reception.
Transmitted by:	Despatch.
When submitted:	Upon departure of casualty carrying plane from combat zone.
Information contained:	Total casualties on board.
Purpose of report:	To insure prompt casualty handling provisions being made at near-shore casualty reception bases.

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Report No. 4.:	Running Record of Battle Casualties. (Note: See pages 39 to 40 for details.)
From:	All casualty carrying vessels.
To:	Original copy—to the medical representative stationed at near-shore casualty debarkation port for transmission to the central casualty recording and screening section. Duplicate copy—to the medical representative at near-shore casualty debarkation port for transmission to the service force command. Later, this copy was returned to the ships concerned as ship's file copy. Triplicate copy—to the medical activity receiving casualties at the near-shore casualty debarkation port as roster of casualties received by this activity. Later, forwarded to a ground force central recording and screening section.
Transmitted by:	Hand.
When submitted:	Upon vessel's arrival in near-shore casualty debarkation port.
Information contained:	See page 39 for sample form.
Purpose of report:	To provide a central casualty recording agency with the earliest possible source of information relative to evacuated casualties.

Report No. 5.:	Emergency Personnel Casualty Report.
From:	Any ship.
To:	Appropriate force commander.
Transmitted by:	Signal or despatch.
When submitted:	When ship's efficiency is reduced.
Information contained:	By number: Ship's complement—dead. Ship's complement—wounded. *Ship's complement—missing.
Purpose of report:	Informing the force commander of the personnel situation on ships whose fighting effectiveness has been materially reduced by reason of casualties.

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Report No. 6.:	Report of casualties.
From:	All ships.
To:	Central casualty recording section and appropriate commanders.
Transmitted by:	Despatch or mailgram.
When submitted:	Earliest practicable time.
Information contained:	Ship's complement personnel only: Date. Full name. Rate/rank and service or file number. Type of casualty—using following nomenclature. "Killed in action". "Died of wounds". "Injuries received in action". *"Missing in action".
Purpose of report:	To provide earliest possible information relative to ship's complement personnel. (AlNav 13 and 162 of 1942.)

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Report No. 7.:	Report of Casualties.
From:	All ships.
To:	Central casualty recording section and appropriate commanders.
Transmitted by:	Letter.
When submitted:	Earliest practicable time.
Information contained:	Ship's complement personnel only: Date. Place. Full name. Rank/rate and service or file number. *Diagnosis:* Indicate whether "Result of enemy action" or "Not result of enemy action". *Prognosis:* (Fatal, probably fatal, serious, favorable). *Disposition:* (Died, retained on board, transferred).
Purpose of report:	Amplification of casualties reported by despatch in report number 6 (ManMedDept. Par. 3518).

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DETAIL OF REPORT NO. 4

All casualty evacuation vessels were required to maintain a casualty record as well as render casualty reports. In order to facilitate reporting under battle conditions, a Running Record of Battle Casualties (RRBC) was developed and supplied to all casualty evacuation vessels well in advance of the operation.

This record, when completed, contained all the pertinent data required for subsequent casualty reporting. Its size, 17" x 22", tended to prevent loss and afforded sufficient space to render legible almost any type of penmanship. The record was prepared in pad form, each pad containing 25 triplicate sets; the orginal copy in black; duplicate copy in red and triplicate copy in green ink. Each pad contained suitable sized carbon paper between the last page and backing. Each original had a full set of instructions and a model of a completed record printed on the reverse side, tumbled in print form, to facilitate reference. Each sheet provided space for recording 15 casualties. The operational employment of the RRBC differed from that shown in the lower left corner of the form, but is explained under Report No. 4, page 36.

To facilitate transmission of this record to the proper recipient, large addressed envelopes were furnished each ship showing the addressee and whether original, duplicate, or triplicate. At the near-shore port of casualty debarkation, these records, in envelopes, were given by hand to the navy medical representative at the port for transmission by courier to the addressee. The triplicate was given to the casualty receiving officer at the port of debarkation.

CONFIDENTIAL

RUNNING RECORD OF BATTLE CASUALTIES

U. S. S. ____________
NAME - NUMBER

		FULL NAME			ORGANIZATION			NEXT OF KIN		DIAGNOSIS				TYPES		
															STRETCHER	
CASE NUMBER	DATE AND TIME RECEIVED ON BOARD	SURNAME FIRST MIDDLE	RANK OR RATE	SERIAL OR SERVICE NUMBER	SERVICE	UNIT	MARITAL STATUS	FULL NAME RELATIONSHIP ADDRESS	FLYING STATUS	NOMENCLATURE OF: WOUND - INJURY - DISEASE	CAUSE OF: WOUND - INJURY	DISPOSITION		AMBULATORY	TRANSPORTABLE	NON TRANSPORTABLE
1	2		4	5	6	7	8	9	10	11	12	13	14	15	16	17
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				
							S M W D		A B C D E F G H I J K L			T - D - DD				

SHIP MEDICAL OFFICER
NAME RANK (MC) USNR

ORIGINAL—(WHITE)—RETAIN IN SHIP'S PERMANENT FILES
DUPLICATE—(RED)—(STATISTICAL COPY)—FORWARD AS DIRECTED BY THE MEDICAL PLAN
TRIPLICATE—(GREEN)—RECEIPTING OFFICER'S COPY

CASUALTY TRANSFER RECEIPT

Time:
Date:

I accept custody of the above listed casualties and/or dead except as follows. Nos: (List the casualty case numbers [column 1 on this sheet] of any casualties or dead NOT TRANSFERRED to medical officer signing this receipt.)

Signature. Rank:

Organization Place:

FIGURE 8.—*Running record of battle casualties*

GENERAL INSTRUCTIONS

Exercise extreme care in compiling information **BE BRIEF BUT BE ACCURATE** When possible, check verbal information against identification and Emergency Medical Tag.

Use indelible pencil—**PRINT** or **WRITE PLAINLY**

Prepare this form in **TRIPLICATE** per instructions printed on reverse of original

INSTRUCTION FOR NUMBERED COLUMNS

1 **CASE NUMBER:** Number **all** casualties, preferably in the sequence of their arrival on board ship. Number the Emergency Medical Tag **with the same number** in large easily read numerals. This will facilitate counting and locating

2. **TIME AND DATE:** Indicate the approximate time of day casualty was received on board ship

3 **FULL NAME:** Surname-First-Middle

4. **RATE OR RANK:** Use Official abbreviation if known otherwise write out in full

ERVICE OR SERIAL NUMBER: List Navy service number—Army serial number Check against identification tag

6 **ORGANIZATION-SERVICE:** Branch of service Abbreviate - USN, USA, etc If prisoner of war, abbreviate as POW and indicate nationality

7. **ORGANIZATION-UNIT:** Indicate what Company, Battalion Regiment, Ship, etc , the casualty was attached to

8. **MARITAL STATUS:** Circle appropriate initial, S-single, M-married; W-widowed, D-divorced.

9 **NEXT OF KIN:** List full name, relationship and address.

10 **FLYING STATUS:** This information **required only in case of death.** Circle appropriate symbol as follows.

Pilot, Copilot, Command Pilot	A
Navigator	B
Bombardier	C
Observer	D
Flight Surgeon	E
Photographer	F
Radio operator gunner	G
Engineer gunner	H
Armorer gunner	I
Gunner	J
Paratrooper-Jump status	K
All on flying status or jump status not covered above	L

11 **DIAGNOSIS-NOMENCLATURE:** Description and anatomical location of wound or injury. Diagnosis in case of illness Use upper portion of space alloted for **original diagnosis** as listed on Emergency Medical Tag. Reserve lower space for change of diagnosis.

12. **DIAGNOSIS-CAUSE:** Describe briefly how wound or injury was received.

13 **DISPOSITION:** Circle appropriate symbol: (Indicate time and date) T-transferred; D-returned to duty (ship's company personnel **only**); DD-died. State to what organization, hospital, ship, port, etc , disposition was made in individual cases **not covered by the signed Casualty Transfer Receipt on this form.**

14 ___ For use as may be desired by the ship's medical officer.

15-16-17 **TRIAGE COLUMNS:** Information intended for the medical units receiving evacuated casualties. Divide patients into two main types—AMBULATORY and STRETCHER. Stretcher cases are further divided into **transportable and non-transportable** types, as follows:

15 **AMBULATORY:** Mark an X in this column for all "walking" casualties.

16. **STRETCHER - TRANSPORTABLE:** Mark an X in this column for those casualties who, in the opinion of the ship's medical officer at the time of casualty debarkation, can safely tolerate **overland** transportation before requiring medical attention. (Include dead.)

17. **STRETCHER - NON-TRANSPORTABLE:** Those casualties requiring **IMMEDIATE** medical/surgical attention upon debarking.

ABBREVIATIONS

CW	- Contused wound.	KIA	- Killed in action.
EW	- Extensive wound.	LW	- Lacerated wound.
FUO	- Fever of undetermined origin.	MW	- Multiple wounds.
		NYD	- Not yet diagnosed.
FC	- Fracture compound.	Pen W	- Penetrating wound.
FCC	- Fracture compound comminuted.	Perf W	- Perforating wound.
		Pun W	- Punctured wound.
FS	- Fracture simple.	SV	- Severe.
GSW	- Gunshot wound.	S	- Slight.
IW	- Incised wound.	WIA	- Wounded in action.

The above Army abbreviations may be used to conserve space only. No abbreviation will be used as a **complete description.**

MODEL

CONFIDENTIAL

RUNNING RECORD OF BATTLE CASUALTIES

U. S. S. LST #001 (NAME · NUMBER)

CASE NUMBER	DATE AND TIME RECEIVED ON BOARD	FULL NAME (SURNAME FIRST MIDDLE)	RANK OR RATE	SERIAL OR SERVICE NUMBER	ORGANIZATION: SERVICE	ORGANIZATION: UNIT	MARITAL STATUS	NEXT OF KIN: FULL NAME RELATIONSHIP ADDRESS	FLYING STATUS	DIAGNOSIS: NOMENCLATURE OF WOUND - INJURY - DISEASE	DIAGNOSIS: CAUSE OF WOUND - INJURY	DISPOSITION		TYPES: AMBULATORY	TYPES: STRETCHER: TRANSPORTABLE	TYPES: STRETCHER: NON-TRANSPORTABLE
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	0600 2-1-44	JOHNSON HERBERT CLIFTON	BM2/c	341 17 92	USN	USS LST-001	S M W (D)	JOHN MASON JOHNSON FATHER RFD #3 OXCROSS, KANSAS	A B C D E F G H I J K L	NO MEDICAL TAG HYSTERIA	GUNFIRE?	T - (D) - DD 0800 2 - 3 - 44	—	—	—	—
2	0600 2-1-44	SMITH FRED THOMAS	2nd LIEUT	0-324 67	USMC	50th AIRBORNE DIVISION	(S) M W D	JAMES SMITH BROTHER 1374 FIRST ST CHICAGO Te AS	A B C D E F G H I J (K) L	BURNS - SV - GENERAL	CRASHED AIRCRAFT	T - D - (DD) 0400 2 - 2 - 44			X	
	0900 2-1-44	BROWN ROBERT NELSON	PFC	333 333 33	USA	10th DIV HQ	S (M) W D	BERTHA BROWN WIFE 3467 SYCAMORE PL LOS ANGELES, OHIO	A B C D E F G H I J K L	GSW - PEN - SHOULDER LEFT - S	SHELL FRAGMENT	T - D - DD — — —		X		
4	2400 2-1-44	THORNDYKE PERCIVAL CECIL	LIEUT	0-67193	BR RN	H.M.S HOLLY	S (M) W D	ELIZABETH THORNDYKE WIFE 10 PEWTER MEWS IPSWICH, SUFFOLK	A B C D E F G H I J K L	NO MEDICAL TAG BLAST CONCUSSION - WATER	UNDER WATER EXPLOSION - (SURVIVOR)	(T) - D - DD 1200 2 - 3 - 44 To APA-999	—	—	—	—
5	0330 2-2-44	SCHULTZ HANS RUDOLF	CPL	7X9341	POW GER	7th COAST ARTILLERY	S M (W) D	WILHELM SCHULTZ FATHER 17 REICH PLATZ BERLIN	A B C D E F G H I J K L	CW - FRONTAL REGION - S INTRACRANIAL INJURY - SV	WIA - STRUCK WITH RIFLE BUTT	T - D - DD — — —				X
							S M W D		A B C D E F G H I J K L			T - D - DD				

SHIP MEDICAL OFFICER — JEROME X. SPOTS (NAME) — LT (JG) (RANK) — (MC) USNR

ORIGINAL—(WHITE)—RETAIN IN SHIP'S PERMANENT FILES
DUPLICATE—(RED)—(STATISTICAL COPY)—FORWARD AS DIRECTED BY THE MEDICAL PLAN
TRIPLICATE—(GREEN)—RECEIPTING OFFICER'S COPY

CASUALTY TRANSFER RECEIPT

Time 0400
Date 2-4-44 I accept custody of the above listed casualties and/or dead except as follows Nos 1 AND 4 (List the casualty case numbers [column 1 on this sheet] of any casualties or dead NOT TRANSFERRED to medical officer signing this receipt.)

Signature JOHN J. SMITH Rank CAPTAIN (MC) USA

Organization: MED DET. 999 FIELD HOSP Place: PITTSBURG, ENGLAND

FIGURE 9.—*Running record of battle casualties*

SUGGESTED OUTLINE FOR A MEDICAL ESTIMATE OF THE SITUATION

1. **Establishment of a Basis for Solution of the Problem.**

(*a*) *Mission*

(1) Summary of the situation. (State briefly the broader aspects of the problem from a medical viewpoint).

(2) Statement of directives, received from higher authority, bearing on evacuation and medical supply.

(3) Appreciation of assigned task. (Visualize the result which is required to be accomplished by the medical service and its effect upon the accomplishment of the task assigned to the force as a whole).

(4) Statement of the mission of the medical service.

(*b*) *Characteristics of the Theater of Operations.*

(1) Consideration of hydrography and terrain.

(2) Influence of climate and weather.

(3) Epidemiological factors.

(4) Special problems of hygiene and sanitation.

(*c*) *Physical and Psychological Factors, Own and Enemy.*

(1) Morale.

(2) Training and experience of combatant personnel.

(3) Training and experience of medical personnel.

(4) Health of personnel.

(*d*) *Tactical Considerations.*

(1) Own Forces.

i. Present dispositions of major elements of own forces.

ii. Tactical line of action under consideration.

iii. Probable tactical developments: (1) Period estimated to carry out operation. (2) Expected location of major elements at intervals during the period.

(2) Enemy.

i. Present dispositions of major elements of enemy forces.

ii. Major capabilities of enemy forces which would interfere with own supply and evacuation (1) during embarkation; (2) en route to the objective; (3) during the landing phase; (4) after landing (build-up period).

iii. Minor capabilities of enemy air, surface, submarine, and ground elements.

2. **Basic Logistic Factors.**

(*a*) *Lines of Communication.*

(1) Roads. (Location, condition, capacity, availability).

(2) Railways. (Location, condition, capacity, availability).

(3) Inland Waterways—navigable rivers and streams. (Feasibility of use: small craft available.)

(4) Labor. (Availability of native after landing.)

(5) Seaport and beach facilities.

(6) Shipping. (Type, capacity, availability, can sea forces keep route open continuously.)

(7) Air. (Location, capacity, availability of landing areas and aircraft.)

(*b*) *Evacuation.*

(1) Estimated casualties and classification.

(2) Adequacy of organic medical means.

(3) Diseases likely to affect operations.

(4) Support needed from higher medical echelons.

(*c*) *Supply.*

(1) Sources of procurement.

i. Base of supply.

ii. Equipment and supplies available at base.

iii. Equipment and supplies available in theater of operation.

(2) Period supply must be effected.

(3) Estimated material required, including weight, square feet, and cubic feet where applicable:

i. To be embarked initially.

ii. To follow in build-up.

(4) Provide for the establishment of a blood-bank.

3. **Essential Elements of Medical Plan.**—List the several elements that should be considered and where alternatives appear feasible. Discuss their advantages and disadvantages.

4. **Conclusions.**

(*a*) State the essential elements of the medical supply and evacuation plan recommended.

(*b*) Indicate whether or not the recommended plan will support the proposed tactical operations.

(*c*) State the unavoidable deficiencies in the plan, if any.

(*d*) State the effect of possible major adverse conditions on the plan and either the alternative measures necessary to overcome them or the unavoidable deficiencies that will rise.

SUGGESTED OUTLINE FOR A MEDICAL ANNEX

(During the advance preparation for an operation, this document constitutes the "Medical plan". When it has been approved by the commander and disseminated, it becomes the medical annex to an operation plan or administrative order. The operation plan becomes an order when the signal is given for its execution. The usual medical annex omits standing operating procedures but clearly draws attention to all deviations therefrom.)

Annex _____to Operation Plan (or Administrative Order).

No._____(Organization).

Issuing Unit,
Place of issue,
Date and hour of issue.

File No._____

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1. Attached Medical Units.
   a. List medical units not normally attached.
   b. Medical equipment and instructions.
2. Organic Medical Service.
   a. Medical equipment and instructions.
3. Sanitation.

   This paragraph should contain important considerations on sanitation and any pertinent data on local diseases and their prevention.
4. Evacuation.
   a. En route to the objective.

   Method of disposition of casualties and noneffectives en route, with particular attention to smaller vessels.

   b. After landing.

   (1) Statement of evacuation policy, i.e., the period of expected convalescence which determines whether a patient will be treated in the theater of operations or evacuated to distant base hospitals.

(*a*) Prior to consolidation of the beachhead.

(*b*) After consolidation of the beachhead.

"Consolidation of the beachhead" must be clearly defined in terms of a distinct phase of the operation and provisions must be made to return short-term patients to the beach when the situation permits.

(2) Statement of time evacuation of patients from shoreward may commence in terms of a phase of the operation. (The landing of assault troops and vital supplies in the initial stages receives priority.)

(3) Evacuation from the beach area.

(4) Location and time of opening of aid and collecting stations inland.

(5) Location and time of opening of emergency field hospitals, division hospital, corps evacuation hospital.

(6) Arrangements for channelizing evacuation and eliminating decentralization of routes and control existing in early phases.

(7) Allocation of ships for care of casualties in the transport area.

(*a*) Designation of vessels to receive surgical cases of special types.

(*b*) Designation of vessels to receive wounded prisoners of war.

(*c*) Limitations on number or type of casualties to be received or time that vessels will be available.

(8) Provisions for the control of shore to ship movement in order that burden may be equalized on facilities afloat.

(9) Use of ambulance ships (such as LSTs) as a link in the shore to ship movement.

(10) Arrival and utilization of hospital ships.

(11) Evacuation by air.

5. Medical Supply.
   - *a.* Initial supplies and where obtained.
   - *b.* Special provisions for automatic supply or exchange.
   - *c.* Resupply and where obtained.
   - *d.* Emergency resupply (such as air-drop).

6. Medical administration.
   - *a.* Location of key medical officers afloat and ashore.
   - *b.* Communications.
   - *c.* Evacuation reports.

_____

Commander

Annexes:
Distribution:
Authentication: (By Flag Secretary or S-4)

Standard Operating Procedure will obviate the necessity for most of the items above. Those not required will be omitted, which will necessitate appropriate renumbering of paragraphs.

TYPE MEDICAL ANNEX FOR FORCES AFLOAT

File No.
SECRET (or CONFIDENTIAL)

Title of the Superior Echelons
Title of the Force
Name of Ship

ANNEX _____
To Operation Order _____
Medical Plan

TASK ORGANIZATION (Medical)

a. Afloat

(1) APA's, AP's

(2) APH's

(3) Hospital Ships or Carriers and Ambulance Ships

(4) Landing Ships

(5) Landing Craft and Amphibious vehicles

(6) Combat Ships and Airplanes

b. Ground forces—See ground force medical annex

c. Air Forces—See Air Force medical annex

1. Information

a. Medical Intelligence matters relevant to the theater of operation may be included in this section.

b. Supporting medical installations

(1) Advanced hospitals

(*a*) Location

(*b*) Bed capacities

(2) Zone of interior

c. Zones of medical responsibility—Naval ground and air elements

d. Evacuation policy

e. Care of the dead

f, g, h, etc.,—Such other relevant information in sufficient detail to insure coordinated action by all elements of command.

Assumptions

a. Special types of warfare that may be anticipated which require special medical provisions. This would include chemical warfare, etc.

b. Any assumptions found in the basic plans which are of medical concern

c. Casualty estimates

2. Mission of the Force Medical Services

3. *Task Groups*—(list in detail the task assignments of the task groups)

a. Afloat—

b. Ground Forces
c. Air Forces } Include such relevant information from the medical annexes of these forces as many be needed to integrate the medical plans of all basic elements.

x. Instructions which apply to all medical task organizations.

4. Medical logistics

a. Forces afloat

b. Ground forces—only relevant information

(1) Beach battalions

(2) Special naval units operating ashore

(3) Automatic exchange

c. Air forces—only relevant information

x. Evacuation plan: See appendix 1 to this annex

5. Axis of signal communication, command and reporting

a. See communication annex for transmission procedure

b. List basic casualty reports

c. List methods of requesting supplies

d. List basic routing as applicable to the task groups involved in the operation

e. Refer to detailed instructions listed in Evacuation Plan—This will include information on the chain of evacuation and evacuation traffic control.

f. Command locations—list the titles of evacuation medical officers and locations.

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